

## CLAIMS

1. Fluoropolymer suitable for the preparation of a fluoroelastomer, said fluoropolymer comprising:
  - 5 a. 10 to 50 mole % of repeating units derived from tetrafluoroethylene;
  - b. 15 to 40 mole % of repeating units derived from hexafluoropropylene;
  - c. 25 to 59 mole % of repeating units derived from vinylidene fluoride;
  - d. 1 to 20 mole % of repeating units derived from chlorotrifluoroethylene; and optionally
  - 10 e. one or more repeating units derived from fluorinated monomers other than tetrafluoroethylene, hexafluoropropylene, vinylidene fluoride and chlorotrifluoroethylene.
2. Fluoropolymer according to claim 1 wherein said optional one or more repeating units  
15 are derived from a perfluorinated vinyl ether monomer.
3. Fluoropolymer according to claim 2 wherein said optional one or more repeating units  
are present in a total amount of upto 25 mole %.
- 20 4. Fluoropolymer according to claim 1 wherein said fluoropolymer has a bi-modal or multi-modal molecular weight distribution.
5. Fluoropolymer according to claim 1 wherein said fluoropolymer comprises one or more  
cure sites capable of engaging in a peroxide cure reaction.  
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6. Fluoropolymer according to claim 5 wherein said cure sites comprise bromine and/or  
iodine atoms.
7. Curable fluoroelastomer composition comprising a fluoropolymer as defined in claim 1  
30 and a cure composition.

8. Curable fluoroelastomer composition according to claim 7 wherein said cure composition comprises a polyhydroxy compound and an onium compound.
- 5 9. Curable fluoroelastomer composition according to claim 7 wherein said cure composition comprises an organic peroxide.
- 10 10. Curable fluoroelastomer composition according to claim 7 further comprising an organic compound comprising a hydride function MH, wherein M is selected from Si, Ge, Sn and Pb.
- 15 11. Component of a fuel management system comprising a fluoroelastomer obtained by curing the curable fluoroelastomer composition defined in claim 7:
12. Method of making a fluoropolymer as defined in claim 1, comprising an aqueous emulsion polymerization of tetrafluoroethylene, hexafluoropropylene, vinylidene fluoride, chlorotrifluoroethylene and optional further fluorinated monomers in amounts appropriate so as to obtain a fluoropolymer having the composition as defined in claim 1.
- 20 13. Method according to claim 12 wherein said method is carried out without addition of a fluorinated surfactant.
- 25 14. Method according to claim 12 wherein an aerosol of liquid fluorinated monomer or a liquid fluorinated hydrocarbon is provided and fed with steam heating into a reaction vessel in which said aqueous emulsion polymerization is carried out.